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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/505,459	02/11/2000	Tomomi Oshiba	KOT-0008	6309

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CANTOR COLBURN, LLP  
55 GRIFFIN ROAD SOUTH  
BLOOMFIELD, CT 06002

EXAMINER

NOTE, JANIS L

ART UNIT	PAPER NUMBER
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1753

9

DATE MAILED: 12/06/2001

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/505,459

Applicant(s)

OSHIBA it al

Examiner

J. DOTE

Group Art Unit

1753

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- ☒ Responsive to communication(s) filed on 6/18/01; 9/24/01
- ☒ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- ☒ Claim(s) 1-5, 8-13 is/are pending in the application.
- Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- ☒ Claim(s) 1-5, 8-13 is/are rejected.
- ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- ☐ Claim(s) \_\_\_\_\_ are subject to restriction or election requirement

## Application Papers

- ☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner
- ☒ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119 (a)-(d)

- ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).
- ☒ All ☐ Some\* ☐ None of the:
- ☒ Certified copies of the priority documents have been received.
- ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_
- ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a))

\*Certified copies not received: \_\_\_\_\_

## Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_
- ☒ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other \_\_\_\_\_

Office Action Summary

1. The examiner acknowledges the amendments to claims 1 and 4-7 filed in Paper No. 5 on Jun. 18, 2001. The examiner also acknowledges the cancellation of claims 6 and 7 and the addition of claims 12 and 13 filed in Paper No. 8 on Sep. 24, 2001. Claims 1-5 and 8-13 are pending.

2. The objections to the specification set forth in the Office action mailed Dec. 15, 2000, Paper No. 3, paragraph 1, have been withdrawn in response to the amendments to the specification at page 11 and in Table 1 filed in Paper No. 5.

The objection to the specification set forth in Paper No. 3, paragraph 2, has been withdrawn in response to the cancellation of claim 6.

The rejections of claims under 35 U.S.C. 112, second paragraph, set forth in Paper No. 3, paragraph 6, have been withdrawn in response to the amendments to claims 1 and 4 and the cancellation of claim 7.

3. The amendment filed in Paper No. 5 on Jun. 18, 2001, is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows:

The amendments to Table 1 as follows:

(1) In example 5, inserting the amount of -- 2.5 parts by weight -- chromium salicylic acid complex.

(2) In examples 7 and 8, inserting the amount -- 2 parts by weight of fatty acid amide wax --.

(3) In example 9, inserting the amounts of -- 3 parts by weight -- of copper phthalocyanine and -- 5 parts by weight of fatty acid amide wax --.

(4) In examples 10 and 11, inserting the amount of -- 2 parts by weight -- zinc salicylic acid complex.

(5) In examples 12 and 13, inserting the amount of -- 2 parts by weight -- chromium salicylic acid complex.

(6) In examples 14 and 15, inserting the amounts of -- 2.5 parts by weight of silica -- and --0.5 part by weight of titanium oxide --.

(7) In comparative example 2, changing the amount of silica from "25 parts by weight" to -- 2.5 parts by weight --.

Applicants argue in Paper No. 5, the paragraph bridging pages 6 and 7, that the amendments correct typographic errors that occurred in the preparation of the US application.

Applicants argue that the amendments to Table 1 are based on the Japanese priority document to which foreign priority under 35 U.S.C. 119 has been claimed.

However, applicants' corrections would not have been recognized by the person having ordinary skill in the art upon review of the originally filed specification. There is no disclosure in the originally filed specification for support of amendments to Table 1 for the following reasons:

(1) Table 2 in the originally filed specification only reports that the toners in examples 5 and 10-13 have particular isolation ratios for the elements Cr or Zn. The originally filed specification does not disclose how much of the chromium salicylic acid complex is used in the toners in examples 5, 12, and 13. Nor does the specification disclose how much of the zinc salicylic acid complex is used in the toners in examples 10 and 11.

(2) Table 2 of the specification only discloses that the toner in example 9 has a particular isolation ratio for the element Cu. The originally filed specification does not disclose how much of the copper phthalocyanine cyan pigment is used in said toner. Nor does the originally filed specification disclose that the toner in example 9 contains any fatty acid amide wax.

(3) There is no disclosure in the originally filed specification that the toners in examples 7 and 8 comprise fatty acid amide wax. Nor does the specification disclose that the toners in examples 14 and 15 comprise any silica or titanium oxide particles.

(4) Originally filed Table 1 reports that the toner in comparative example 2 comprises 25 parts by weight silica. The specification does not disclose that silica is present in an amount of 2.5 parts by weight as now reported in amended Table 1.

Applicants may not rely on the disclosure of their foreign priority document to support correction of an error in the pending application. A claim for priority is simply a claim for the benefit of an earlier filing date for subject matter that is common to two or more applications, and does not serve to incorporate the content of the priority document in the application in which the claim for priority is made. Ex parte Bondiou, 132 USPQ 356 (Bd. App. 1961). MPEP 2163.07, II (Aug. 2001).

Applicants are required to cancel the new matter in the reply to this Office action.

4. Applicants in Paper No. 4 did not refute the examiner's interpretation that the "element" having an isolation ratio of not more than 10% by number recited in the instant claims refers to a component that is a part of the toner particles (i.e., the colored resin particles). In other words, the "element" is a component used to form the toner particles, and is not an external additive added to the already formed toner particles, such as a fluidity agent.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 11 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 11 is indefinite because it is dependent on now canceled claims 6 and 7. It is not clear to what toner "the toner" in claim 11 refers.

7. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

8. Claim 12 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 12 recites that the isolation ratio of the element is not more than 2.5% by weight. The originally filed specification does not provide an adequate written description of said isolation ratio. The originally filed specification teaches that the isolation ratio of the element is not more than 2.5% by number, not by weight. Specification, page 4, lines 4-6, and page 6, line 17. The specification defines the isolation ratio as the ratio of the number of synchronous light emission particles containing the element to the sum of the number of synchronous and non-synchronous light emission particles. Specification, page 8, lines 20-24.

9. Claims 1-4 and 8-12 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over US 5,376,493 (Kobayashi), as further evidenced by ACS File Reg. No. 147-14-8.

Kobayashi discloses a toner comprising toner particles that comprise a binder resin and 40 parts by weight of C.I. Pigment Blue 15, which is identified as copper phthalocyanine (see ACS File Reg. No. 147-14-8). See Example 3 at col. 12. Copper phthalocyanine has a molecular weight of 576.08. The amount of copper in the toner particles is about 0.67 wt% based on the total weight of the toner particles (i.e., (40 parts by weight/660 parts by weight) × ((63.54 atomic weight of



$\text{Cu}) / (576.08 \text{ molecular weight of Cu phthalocyanine}) \times 100$ ). The amount of copper is determined from the information provided in Example 3. The amount of 0.67 wt% is within the amount of "not less than 0.1 wt%" recited in instant claim 1. The toner is used with a carrier. Col. 10, lines 45-46. Kobayashi further discloses that said toner can be used in a process comprising the steps recited in instant claim 11. See col. 11, lines 55-57; Fig. 1; and col. 10, lines 46-66.

Kobayashi does not disclose that its toner comprises copper in an isolation ratio as recited in the instant claims. The instant specification discloses that toners that comprise an element as recited in instant claim 1 in an isolation ratio as recited in the instant claims, have stable chargeability after 10,000 copies, and provide toner images without fog even after 100,000 copies. See Table 2 at page 38, and the accompanying text. Kobayashi's toner of Example 3 exhibits stable chargeability after 50,000 copies, and provides toner images free from fog after 50,000 copies. See Example 3 and Table 2 at col. 12. Since Kobayashi's toner meets the compositional limitations of the instant claims, but for the isolation ratio recited in the instant claims, and has the properties sought by applicants, it is reasonable to presume that Kobayashi's toner comprises the element copper in an isolation ratio as recited in

the instant claims. The burden is on applicants to prove otherwise. In re Fitzgerald, 205 USPQ 594 (CCPA 1980).

Instant claim 8 requires that the toner of claim 1 be obtained by emulsion polymerization. Thus, the toner is described in product-by-process format. Kobayashi does not exemplify a toner obtained by emulsion polymerization as recited in instant claim 8. Kobayashi's toner is obtained by the steps of: mixing in a solvent, a binder resin soluble in the solvent and particles of the colorant copper phthalocyanine that is insoluble therein; dispersing the particles of the colorant in the binding resin to obtain a dispersed mixture; removing the solvent from the dispersed mixture to obtain a colorant-binding resin composition; mixing said composition with a binder resin and a charge controlling agent; melt-kneading the mixture; and forming toner particles from the melt-kneaded mixture. See Example 3. As discussed above, Kobayashi's toner has the properties sought by applicants, and appears to comprise the element copper in an isolation ratio as recited in the instant claims. Thus, Kobayashi's process appears to produce a toner that is the same or similar to that made by the emulsion polymerization process recited in the instant claim. The burden is on applicants to prove otherwise. In re Marosi, 218 USPQ 289 (Fed. Cir. 1983); In re Thorpe, 227 USPQ 964 (Fed. Cir. 1985); MPEP 2113.

10. Claims 1-4 and 8-12 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over US 5,5,856,055 (Ugai).

Ugai discloses a developer comprising a carrier and a toner, which comprises toner particles comprising a binder resin, a colorant, azo iron complex (1), and an aluminum salicylic compound. See col. 22, lines 41-49, and Toners Q and R in Tables 2 and 3 at col. 26. Azo iron complex (1) at col. 8 has a calculated molecular weight of 904.6. The amount of iron in the toner particles of Toners Q and R is about 0.14 wt% and 0.22 wt% based on the total weight of the toner particles. The amounts of iron are determined from the information provided in Table 3. The amounts of 0.14 wt% and 0.22 wt% are within the amount of "not less than 0.1 wt%" recited in instant claim 1. Toners Q and R are obtained by an emulsion polymerization method as recited in instant claim 8. Ugai further discloses that said toners can be used in a process comprising the steps recited in instant claim 11. See Fig. 3, and col. 20, line 50, to col. 21, line 18.

Ugai does not disclose that Toners Q and R comprise the element iron in an isolation ratio as recited in the instant claims. The instant specification discloses that toners that comprise an element as recited in instant claim 1 in an isolation ratio as recited in the instant claims, have stable chargeability after 10,000 copies, and provide toner images without fog even

after 100,000 copies. See Table 2 at page 38, and the accompanying text. The specification also discloses that said toners provide stable images for many runs. Page 3, lines 2-7. Ugai's Toners Q and R exhibit stable chargeability after 50,000 copies, and provide high quality toner images after 30,000 copies. Toners Q and R also provide images having no or little fog under high temperature and high humidity conditions. See Toners Q and R in Table 5 at cols. 27 and 28, and the accompanying text. Ugai's toners meet the compositional limitations of the instant claims, but for the isolation ratio of iron recited in the instant claims. However, Ugai's toners are made by the process recited in instant claim 8, and have the properties sought by applicants. Therefore, it is reasonable to presume that Ugai's toners comprise the element iron in an isolation ratio as recited in the instant claims. The burden is on applicants to prove otherwise. Fitzgerald, supra.

11. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ugai.

Ugai discloses a developer and a method of forming an image using said developer, as described in paragraph 11 above, which is incorporated herein by reference.

Ugai does not disclose that the styrene copolymer binder resin in Toners Q and R has the molecular weight properties

recited in instant claim 13. However, Ugai discloses that said styrene copolymer binder resin may preferably have a Mn of 1,000 to 100,000 and a Mw/Mn of from 2 to 100, which both meet the limitations recited in instant claim 7. Col. 16, lines 43-48. Based on an Mn of 1,000 to 100,000 and a Mw/Mn of from 2 to 100, the styrene copolymer binder has a Mw ranging from 2,000 to 10,000,000, which overlaps the limitation of 200 to 1,000,000 recited in instant claim 13. The Mw lower limit of 2,000 meets the limitation of 200 to 1,000,000.

It would have been obvious for a person having ordinary skill in the art, in view of the teachings of Ugai, to use a styrene copolymer having a Mw/Mn ranging from 2 to 100, and a Mn and Mw that are within the limitations of instant claim 13 in Ugai's Toners Q and R and to use said toners in a process for forming toner images, because that person would have had a reasonable expectation of successfully obtaining toners that have stable chargeability under various environmental conditions, and provide high-quality toner images continually for a long period. Ugai, col. 3, lines 1-8.

12. Claims 1-3 and 8-12 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over US 5,645,967 (Sato).

Sato discloses an electrophotographic developer comprising a carrier and a toner that comprises toner particles comprising a binder resin, carbon black, and a charge controlling chromium salicylic complex. See Composition 30 in Table 4 at col. 19, Example 23 in Table 8 at cols. 23-24; col. 14, lines 11-14; and col. 12, lines 6-18. The chromium salicylic complex has a calculated molecular weight of 584. The amount of chromium in the toner particles is about 0.4 wt% based on the total weight of the toner particles (i.e.,  $(2 \text{ parts by weight} / 100 \text{ parts by weight}) \times (70/30) \times ((52 \text{ atomic weight of Cr}) / (584 \text{ molecular weight of Cr complex})) \times 100$ ). The amount of chromium is determined from the information provided in Table 4; col. 14, lines 11-14; and col. 12, lines 6-14. The amount of 0.4 wt% is within the amount of "not less than 0.1 wt%" recited in instant claim 1. Sato further discloses that said toner can be used in a process comprising the steps recited in instant claim 11. See col. 1, lines 14-18; and col. 12, lines 18-29.

Sato does not disclose that its toner comprises chromium in an isolation ratio as recited in the instant claims. The instant specification discloses that toners that comprise an element as recited in instant claim 1 in an isolation ratio as recited in the instant claims, have stable chargeability after 10,000 copies, and provide toner images without fog even after 100,000 copies. See Table 2 at page 38, and the accompanying text.

Sato's toner in Example 23 exhibits stable chargeability after 50,000 copies, and provides high quality toner images free from fog after 50,000 copies. See Example 23 in Table 8. Since Sato's toner meets the compositional limitations of the instant claims, but for the isolation ratio recited in the instant claims, and has the properties sought by applicants, it is reasonable to presume that Sato's toner comprises the element chromium in an isolation ratio as recited in the instant claims. The burden is on applicants to prove otherwise. In re Fitzgerald, 205 USPQ 594 (CCPA 1980).

Instant claim 8 requires that the toner of claim 1 be obtained by emulsion polymerization. Thus, the toner is described in product-by-process format. Sato does not exemplify a toner obtained by emulsion polymerization as recited in instant claim 8. Sato's toner is obtained by the steps of: mixing the chromium salicylic complex with carbon black; mixing the mixture with a binder resin, a colorant, and wax; melt-kneading the mixture; and forming toner particles from the melt-kneaded mixture. Col. 14, lines 10-14, referring to col. 12, lines 6-17 and col. 12, line 60, to col. 13, line 3. As discussed above, Sato's toner has the properties sought by applicants, and appears to comprise the element chromium in an isolation ratio as recited in the instant claims. Thus, Sato's process appears to produce a toner that is the same or similar to that made by the emulsion

polymerization process recited in the instant claim. The burden is on applicants to prove otherwise. In re Marosi, 218 USPQ 289 (Fed. Cir. 1983); In re Thorpe, 227 USPQ 964 (Fed. Cir. 1985); MPEP 2113.

13. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sato combined with US 5,037,715 (Hagiwara).

Sato discloses a developer and a method of forming an image using said developer, as described in paragraph 13 above, which is incorporated herein by reference.

Sato does not disclose the use of a binder resin having the molecular weight properties recited in instant claim 13.

However, Sato discloses that the toner binder resin can be a polyester or a polyurethane polymer. Col. 10, line 52. Hagiwara discloses a toner urethane-modified polyester resin having a Mn, a Mw, and a Mw/Mn that meet the limitations of the instant claims. See Preparation Example Nos. 3-7. For example, the urethane-modified polyester resin of Preparation Example 3 has a Mn of 3200, a Mw of 125,000, and a Mw/Mn of 39. Hagiwara discloses that toners that comprise said urethane-modified polyester binder resins have good anti-blocking, fixing, and storage properties. Said toners also provide good images free of fog. Col. 1, line 61, to col. 2, line 16; and Examples 3-7 in Table 4 at cols 9 and 10.



It would have been obvious for a person having ordinary skill in the art, in view of the teachings of Hagiwara, to use a Hagiwara's urethane-modified polyester resin having a Mn, Mw, and Mw/Mn that meet the limitations of instant claim 13 as the toner binder resin in Sato's toner of Example 23 and to use said toner in a process for forming toner images, because that person would have had a reasonable expectation of successfully obtaining a toner having the benefits disclosed by Hagiwara, and providing good toner images without fog.

14. Applicants' arguments filed in Paper No. 5 with respect to the rejections over Kobayashi, Ugai, or Sato set forth in paragraphs 9-13 above have been fully considered but they are not persuasive.

Applicants argue that the prior art does not anticipate nor is it reasonable to presume that the prior art toners have the isolation ratio recited in the instant claims. Applicants argue that the references do not necessarily possess the isolation ratio because the isolation ratio is not automatically determined by the composition of each component nor its specific amount in the composition, but depends on how the toners are produced. Applicants cite page 11, lines 11-13, and page 19, lines 5-10, of the specification. Applicants further assert that the Rule 132 declaration filed in Paper No. 6 on Jun. 18, 2001, executed by

Ken Ohmura on Jun. 13, 2001, demonstrates that none of the prior art toners possesses the isolation ratio recited in the instant claims. Applicants also argue that the prior art does not teach that their respective toners have the isolation ratio recited in the instant claims.

Applicants' arguments are not persuasive. As discussed in each of the rejections, the toners disclosed by Kobayashi, Ugai, or Sato, not only meet the compositional limitations of the toner recited in the instant claims, but also appear to exhibit properties that are substantially identical to those exhibited by the instant claimed invention. The prior art toners exhibit stable chargeability and provide toner images without fog. The instant specification discloses that toners comprising an element in an isolation ratio as recited in the instant claims also exhibit stable chargeability and provide toner images without fog. Thus, the examiner has presented a reasonable basis to support her determination that the alleged inherent characteristics flow from the teachings of the prior art. Accordingly, a prima facie case has been established that the toners disclosed by the prior art are the same or substantially the same as that claimed by applicants.

The Rule 132 declaration is insufficient to show that the prior art toners do not have an isolation ratio as recited in the instant claims. Declarant states that toners K, Q, R, and S have

been prepared in accordance with Kobayashi's example 3, Ugai's examples Q and R, and Sato's example 23. The declaration shows that after 10,000 copies, the chargeability of each of toners K, Q, R, and S decreases by approximately 50%, and after 100,000 copies, the formation of fog is observed in the toner images.

However, as discussed in each of the above rejections, the prior art discloses that their respective toners exhibit charge stability and provide images without fog. Kobayashi's toner of example 3 exhibits an initial charging of  $-34.5 \mu\text{C/g}$  and after copying 50,000 copies, exhibits a charge of  $-30.2 \mu\text{C/g}$ . Kobayashi's toner also provides toner images free from fog after 50,000 copies. See Kobayashi, example 3 and Table 2 at col. 12. Ugai's toners Q and R exhibit from a 0-10% variation in charging after 50,000 copies from the initial charging, and provide images having no or little fog under high temperature and high humidity conditions. See Ugai, Table 5. Sato's toner in Example 23 exhibits an initial charging of  $-13.2 \mu\text{C/g}$  and after copying 50,000 copies, exhibits a charge of  $-13.0 \mu\text{C/g}$ . Sato's toner also provides toner images free from fog after 50,000 copies. See Sato, Table 8. Declarant has not provided any explanation as to why toners K, Q, R, and S, which declarant asserts to be of the prior art, exhibit properties that are inconsistent with those reported in the prior art. Applicants have not provided any explanation as to why toners K, Q, R, and S exhibit a

chargeability after 10,000 copies that is much less than the chargeability after 50,000 copies reported in the prior art. Applicants have also not explained why toners K, Q, R, and S provide toner images with fog, while the prior art discloses that their toners provide images without fog. The declaration does not appear to adequately compare to the prior art toners. Thus, the declaration does not show that the prior art toners do not have the isolation ratio recited in the instant claims. Accordingly, the rejections stand.

15. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

16. Claims 1-3, 5, and 8-13 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over US 6,238,836 B1 (Nakamura).

Nakamura discloses a developer comprising a carrier and a toner, which comprises toner particles comprising a binder resin, a colorant, and a molybdenum containing quaternary ammonium

compound. See, for example, embodiment 6 at col. 25 and in Table 3, compound 2-1 at col. 13, and resin synthesis example 2 at col. 20 and in Table 1. The binder resin meets the limitations recited in instant claim 13. The resin has a Mn of 2900, a Mw of 233,500, and Mw/Mn of 80.5. The molybdenum containing quaternary ammonium compound has a calculated molecular weight of 2208. The amount of molybdenum in the toner particles of embodiment 6 is about 0.49 wt% based on the total weight of the toner particles. The amounts of molybdenum are determined from the information provided in Table 3. The amount of 0.49 wt% is within the amount of "not less than 0.1 wt%" recited in instant claim 1. Nakamura further discloses that said toners can be used in a process comprising the steps recited in instant claim 11. Col. 18, lines 61-65, and col. 27, lines 27-36.

Nakamura does not disclose that the toner comprises the element molybdenum in an isolation ratio as recited in the instant claims. The instant specification discloses that toners that comprise an element as recited in instant claim 1 in an isolation ratio as recited in the instant claims, have stable chargeability after 10,000 copies, and provide toner images without fog even after 100,000 copies. See Table 2 at page 38, and the accompanying text. The specification also discloses that said toners provide stable images for many runs. Page 3,

lines 2-7. Nakamura's toner in embodiment 6 exhibits stable chargeability after 50,000 copies, and provide high quality toner images with less than 0.01 fog after 50,000 copies. See embodiment 6 in Table 5, and the accompanying text. Nakamura's toners meet the compositional limitations of the instant claims, but for the isolation ratio recited in the instant claims, and have the properties sought by applicants, it is reasonable to presume that Nakamura's toners comprise the element molybdenum in an isolation ratio as recited in the instant claims. The burden is on applicants to prove otherwise. Fitzgerald, supra.

Instant claim 8 requires that the toner of claim 1 be obtained by emulsion polymerization. Thus, the toner is described in product-by-process format. Nakamura does not exemplify a toner obtained by emulsion polymerization as recited in instant claim 8. Nakamura's toner is obtained by the steps of: mixing the molybdenum containing quaternary ammonium compound, the colorant, the binder resin, and wax; melt-kneading the mixture; and forming toner particles from the melt-kneaded mixture. Col. 25, lines 4-20, referring to col. 31-35. As discussed above, Nakamura's toner has the properties sought by applicants, and appears to comprise the element molybdenum in an isolation ratio as recited in the instant claims. Accordingly, Nakamura's process appears to produce a toner that is the same or similar to that made by the emulsion polymerization process

recited in the instant claim. The burden is on applicants to prove otherwise. Marosi, supra; Thorpe, supra; MPEP 2113.

17. Applicants' amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicants are reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Janis L. Dote whose telephone number is (703) 308-3625. The examiner can normally be reached Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Nam Nguyen, can be reached on (703) 308-3322. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-3599 for after final faxes, and (703) 305-7718 for other official faxes.

Any inquiry of papers not received regarding this communication or earlier communications should be directed to Supervisory Application Examiner Alva Catlett, whose telephone number is (703) 308-1100.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

JLD  
December 3, 2001

*Janis L. Dote*  
JANIS L. DOTE  
PRIMARY EXAMINER  
GROUP 1500  
1700